

TECHNICAL REVIEW DOCUMENT
For
RENEWAL OF OPERATING PERMIT 96OPAD160

ConocoPhillips Pipeline – Denver Terminal
Adams County
Source ID 0010015

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January - April 2011

I. Purpose

This document establishes the basis for decisions made regarding the applicable requirements, emission factors, monitoring plan and compliance status of emission units covered by the renewed Operating Permit for the ConocoPhillips Pipeline – Denver Terminal. The previous Operating Permit for this facility was issued on June 1, 1999, was renewed on June 1, 2004 and was last revised on April 18, 2007 and expired on June 1, 2009. However, since a timely and complete renewal application was submitted, under Colorado Regulation No. 3, Part C, Section IV.C all of the terms and conditions of the existing permit shall not expire until the renewal operating permit is issued and any previously extended permit shield continues in full force and operation.

This document is designed for reference during the review of the proposed permit by the EPA, the public, and other interested parties. The conclusions made in this report are based on information provided in the renewal application submitted on May 29, 2008, previous inspection reports and telephone conversations and email correspondence with the applicant. Please note that copies of the Technical Review Document for the original permit and any Technical Review Documents associated with subsequent modifications of the original Operating Permit may be found in the Division files as well as on the Division website at <http://www.cdphe.state.co.us/ap/Titlev.html>. This narrative is intended only as an adjunct for the reviewer and has no legal standing.

Any revisions made to the underlying construction permits associated with this facility made in conjunction with the processing of this operating permit application have been reviewed in accordance with the requirements of Regulation No. 3, Part B, Construction Permits, and have been found to meet all applicable substantive and procedural requirements. This operating permit incorporates and shall be considered to be a combined construction/operating permit for any such revision, and the permittee shall be allowed to operate under the revised conditions upon issuance of this operating permit without applying for a revision to this permit or for an additional or revised construction permit.

II. Description of Source

This facility consists of a petroleum marketing and storage terminal. Gasoline, Propane, Kerosene Turbine Fuel (KTF) and Diesel products are received from a pipeline, stored and distributed to tank trucks. Natural Gas Liquids (NGL) is received by tank trucks, stored and distributed to a pipeline.

This facility is located at 3960 East 56th Avenue, Commerce City, Colorado. The Denver Metro Area is classified as attainment/maintenance for particulate matter less than 10 microns in diameter (PM₁₀) and carbon monoxide (CO). Under that classification, all SIP-approved requirements for PM₁₀ and CO will continue to apply in order to prevent backsliding under the provisions of Section 110(l) of the Federal Clean Air Act. The Denver Metro Area is classified as non-attainment for ozone and is part of the 8-hr Ozone Control Area as defined in Regulation No. 7, Section II.A.1.

There are no affected states within 50 miles of the plant. The following Federal Class I designated areas are within 100 kilometers of the plant: Rocky Mountain National Park.

This facility is categorized as a NANSR major stationary source (Potential to Emit of VOC or NO_x \geq 100 Tons/Year). Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.26 and 42) for VOC or NO_x or a modification which is major by itself (i.e. a Potential to Emit of \geq 100 TPY of either VOC or NO_x) may result in the application of the NANSR review requirements.

Based on the information provided by the applicant, this source is categorized as a minor stationary source for PSD as of the issue date of this permit. Any future modification which is major by itself (Potential to Emit of \geq 250 TPY) for any pollutant listed in Regulation No. 3, Part D, Section II.A.42 for which the area is in attainment or attainment/maintenance may result in the application of the PSD review requirements

Actual emissions at the facility for the two most recent years have been calculated using an incorrect emission factor. The inflated values are included in the inspection reports for the last several years. The potential to emit for the facility is outline below.

Potential to Emit (TPY)	NO _x	CO	VOC	HAPs Single	HAPs Combined
Facility Wide	14.9	39.3	129.4	9	24

Applicable Requirements

Although the facility is not a major source for HAPs, the EPA has been promulgating rules for area sources (sources that are not major), those requirements that could potentially apply to this facility are discussed below:

Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities (40 CFR Part 63 Subpart BBBB)

Final revision to the Gasoline Distribution GACT for area sources was published in the Federal Register on March 7, 2008 and applies to bulk gasoline terminals, defined as having a throughput greater than 20,000 gallons per day. This requirement affects gasoline storage tanks and gasoline loading racks. Per this requirement, the Division has determined that the ConocoPhillips Pipeline – Denver Terminal is subject to the provisions of Subpart BBBB. Since the facility was an existing source (constructed prior to January 10, 2008), the source must comply with the requirements of Subpart BBBB by January 10, 2011.

This source has submitted an “in lieu of” notification that exempts them from the performance test as specified in §63.11092. The requirements associated with this performance test are also inapplicable.

Compliance Assurance Monitoring (CAM)

The loading rack and the gasoline storage tanks (except T501) are equipped with a vapor combustion unit to control VOC and HAP emissions and has potential uncontrolled emissions of VOC over 100 tons/yr. Therefore, the loading rack and gasoline storage tanks are subject to the compliance assurance monitoring (CAM) requirements. The CAM requirements were included in the first renewal permit.

The destruction of VOC is dependent upon combustion. The flare is equipped with a thermal device to ensure that a flame is present. If the thermal device indicates there is no flame detected, the vapors will continue to stay in its original tank, S001, and not be routed to the flare.

The Area Source MACT for Gasoline Distribution Bulk Terminals, Bulk Plants and Pipeline Facilities requires sources equipped with a thermal oxidation system to monitor the presence of a flame. The CAM rule specifies that monitoring required for a MACT standard is presumptively acceptable monitoring, provided that the monitoring is applicable to the performance of the control device (40 CFR Part 64 § 64.4(b)(4)). Since the MACT monitoring is for the same control device (an enclosed flare is considered a thermal oxidation system under the MACT), the Division considers that the indicators are presumptively acceptable.

Greenhouse Gases

In 2009 and 2010, EPA issued two rules related to Greenhouse Gases (GHG) that may affect the facility.

On October 30, 2009, EPA published a rule for the mandatory annual reporting of GHG emissions to EPA from large GHG emissions sources in 40 CFR part 98. The facility may be required to identify GHG emissions in future Title V permit applications. Such identification may be satisfied by including some or all of the information reported to EPA to meet the GHG reporting requirements.

Propane Dryer Train (06AD1169)

The original construction permit for a propane dryer train as issued on February 16, 2007 and expired on August 16, 2008. The expiration date was extended until February 16, 2010 due to a request from the source. According to the source, the propane dryer train was not installed as of January 11, 2011 and therefore the construction permit was cancelled. Accordingly, the requirements regarding the propane dryer train were not included in the operating permit.

III. Discussion of Modifications Made

Source Requested Modifications

The renewal application received on May 28, 2008 requested the following modifications:

- Remove the Soil Vapor Extraction System from the permit, which shutdown in 2005 and will not be restarted.
- Include the requirements for NESHAP Subpart BBBBBB (Gasoline Distribution GACT).
- Increase gasoline and distillate throughput limitations from 400MM gal/yr to 425MM gal/yr.
- Adjust the loading rack throughput for distillates from 1.6 Billion gal/yr to 425MM gal/yr.

The source's requested modifications were addressed as follows:

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- Revised the responsible official and permit contact information in accordance with information submitted by the source.

Section I – General Activities and Summary

- Summary of emission units updated to reflect the removal of the soil vapor extraction system. Accordingly, subsequent references to soil vapor extraction were also removed.

Section II – Specific Permit Terms

- Gasoline throughput limitations for the gasoline storage tanks were increased to 425MM gal/yr. The loading rack throughput for both gasoline and distillates were adjusted to 425MM gal/yr. The distillate throughput for the additive and distillate storage tanks also reflects adjusted values. These increased throughput limits are in accordance with the modified construction permit 11AD935 issued on April, 28, 2009.
- Condition 1.6, 4.2, and 5 were added to include new requirements to NESHAP Subpart BBBBBB. The source submitted a statement certifying the compliance status of the loading rack in lieu of the performance test required under §63.11092(a)(1). Requirements regarding the performance test were consequently omitted from the permit conditions.
 - The submerged fill requirements of Subpart BBBBBB were omitted considering the Reg. 7 Section III.B requirements are more stringent than those in Subpart BBBBBB.

Other Modifications

In addition to the source requested modifications, the Division has included changes to make the permit more consistent with recently issued permits, include comments made by EPA on other Operating Permits, as well as correct errors or omissions identified during inspections and/or discrepancies identified during review of this renewal. These changes are as follows:

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- It should be noted that the monitoring and compliance periods and report and certification due dates are shown as examples. The appropriate monitoring and compliance periods and report and certification due dates will be filled in after permit issuance and will be based on permit issuance date. Note that the source may request to keep the same monitoring and compliance periods and report and certification due dates as were provided in the original permit. However, it should be noted that with this option, depending on the permit issuance date, the first monitoring period and compliance period may be short (i.e. less than 6 months and less than 1 year).

Section I – General Activities and Summary

- Updated Condition 1.1 to reflect the location's attainment status.
- Updated Condition 3.1 (status of source with respect to PSD requirements) to reflect Division's current standard language and current Regulation No. 3 citations.

Section II – Specific Permit Terms

- Updated emissions and throughput limitations throughout the section in accordance with the modified construction permit 11AD935.
- Removed Condition 1.4 and 1.5.3 that referred to the Vapor Combustor Unit as a flare. According to NSPS definitions, a flare is without enclosure. The device in question is a John Zink – ZTOF enclosed smokeless flare. Requirements regarding thermal oxidation control devices at this facility are included in the CAM and Subpart BBBBBB requirements.
 - The original permit application and the source's subsequent references describe the flare as a John Zink "2TOF". Based on research, the Divisions believes this a typo and the serial number on the flare should read "ZTOF".
- Restructured Condition 1.5 regarding Reg. 7 to maintain consistency with other recently issued operating permits.
- Removed "bubble" reference in Condition 1.7 and replaced with definition.

- Changed visible opacity limits in Condition 1.8 were changed from 20% to 30% in accordance with Reg. 1, Section II.A.5 regarding smokeless flares. The new monitoring requirements reference Method 9 rather than Method 22.
- The third maintenance flare located at the La Junta facility has been removed from the operating permit. This flare should be included in the permit for the La Junta facility.
- The facility wide emission limit has been changed to reflect the correct emissions factors and also to include the two flares located at the facility. The requested emission limit (calculated with correct emissions factors) was 135.8 tons per year of VOC. This included the flare located at the La Junta facility. Additionally, in VCU emission calculations, the destruction efficiency of KTF routed to the VCU was not accounted for. The emissions without this flare and accounting for VCU destruction of KTF gases are the 129.4 figure that was included in the permit.

Section III – Permit Shield

- Updated the Reg 3 Citation for the permit shield

Section IV – General Permit Conditions

- Updated the general permit conditions to the current version (11/16/2010).

Appendices

- Cleared the list of modifications from Appendix F related to the previous issuance.
- Added CAM plan in Appendix G.